UNITED
NATIONS

A

General Assembly

Distr.
GENERAL

A/AC.237/88
18 January 1995

Original: ENGLISH

INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Eleventh session
New York, 6-17 February 1995
Item 8 (a) of the provisional agenda

MATTERS RELATING TO ARRANGEMENTS FOR THE FINANCIAL MECHANISM

IMPLEMENTATION OF ARTICLE 11 (FINANCIAL MECHANISM), PARAGRAPHS 1-4

Transfer of technology

Note by the interim secretariat

CONTENTS

		Paragraphs	Page
I.	INTRODUCTION	1-3	3
	A. Committee mandate	1	3
	B. Scope of the note	2	3
	C. Possible action by the Committee	3	3
II.	RELEVANT PROVISIONS OF THE CONVENTION AND INITIAL COMMITTEE GUIDANCE: ELEMENTS OF A FRAMEWORK FOR TRANSFER OF TECHNOLOGY	4-13	3

GE.95-60249

		Paragraphs	Page
III.	WAYS AND MEANS OF OPERATIONALIZING TRANSFER OF TECHNOLOGY	14-18	7
	A. Strengthening technological capabilities	15-16	7
	B. Information exchange	17-18	8

I. INTRODUCTION

A. Committee mandate

1. At its tenth session the Committee requested the interim secretariat to prepare a paper on transfer of technology covered by the Convention, including elements of a framework for such transfer and modalities on ways and means of operationalizing the relevant articles mentioned in the Convention pertaining to transfer of technology. In addition, delegations were invited to submit their views on this issue (A/AC.237/76 para. 88). In this regard, attention is drawn to document A/AC.237/Misc.41 containing such views and also to document A/AC.237/Misc.43 containing views of delegations on the adequacy of commitments, as some of the submissions therein are relevant to the transfer of technology.

B. Scope of the note

2. The present note recalls provisions of the Convention and initial Committee guidance that are relevant to the transfer of technology. The note describes how this can provide elements of a framework for such transfer and attempts a preliminary discussion of ways and means of operationalizing transfer of technology through the strengthening of technological capabilities of recipient countries and the exchange of technological information.

C. Possible action by the Committee

3. The Committee, at its previous sessions, has not given any substantive consideration to the issue of transfer of technology. An exchange of views on this issue by delegations could enable them to identify what specific conclusions they are prepared to recommend to the Conference of the Parties (COP) in terms of guidance to the financial mechanism and with respect to activities or institutional arrangements for the facilitation of technology transfer, taking into account the terms of reference and functions of the Subsidiary Body for Scientific and Technological Advice (SBSTA) and other considerations outlined in the present note.

II. RELEVANT PROVISIONS OF THE CONVENTION AND INITIAL COMMITTEE GUIDANCE: ELEMENTS OF A FRAMEWORK FOR TRANSFER OF TECHNOLOGY

4. Transfer of technology has a very important place in the political balance of the Convention as shown by Article 4.7 which provides in part that "the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their

commitments under the Convention related to financial resources and transfer of technology..." Many other provisions of the Convention are relevant to the transfer of technology: in some it is explicitly mentioned; in others, the substance is relevant to it. Among such provisions are the following:

(a) Article 2, on the objective of the Convention, states that "the ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."

(b) Article 4, on commitments, lists a number of measures in paragraph 1, as follows:

(i) "Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors" (Article 4.1(c));

(ii) "Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems" (Article 4.1(d));

(iii) "Cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods" (Article 4.1(e));

(iv) "Promote and cooperate in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate the remaining

uncertainties regarding the causes, effects, magnitude and timing of climate change and the economic and social consequences of various response strategies (Article 4.1(g));

(v) "Promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate change system and climate change, and to the economic and social consequences of various response strategies" (Article 4.1(h)).

5. Other measures in Article 4.1 which appear less directly relevant to the transfer of technology may involve capacity building or the transfer of know-how through means similar to those appropriate for the transfer of technology.

6. Article 4.2(b) mentions the possibility for developed country Parties to implement policies and measures jointly with other Parties; such joint implementation may involve the transfer of technology.

7. Article 4.3 states that "the developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with that Article. The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties."

8. Article 4.4 states that "the developed country Parties and other developed Parties included in Annex II shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects."

9. Article 4.5 provides that "the developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies."

10. Article 9 establishes a subsidiary body for scientific and technological advice (SBSTA) to the COP, and defines its functions, which include "[identifying] innovative, efficient and state-of-the-art technologies and know-how and [advising] on the ways and means of promoting development and/or transferring such technologies" (Article 9.2(c)). The functions of the SBSTA with reference to the transfer of technology have been spelled out in Committee decision 10/2 (A/AC.237/76, annex I.B; see appendix I to annex I to decision 10/2) and will be further considered by the Committee at its present session under item 7 (e) of the provisional agenda.

11. Article 11.1 defines a mechanism for the provision of financial resources on a grant or concessional basis, including for the transfer of technology. The Global Environment Facility is presently operating that mechanism. Article 11.5 adds that "the developed country Parties may also provide and developing country Parties avail themselves of, financial resources related to the implementation of the Convention through bilateral, regional and other multilateral channels."

12. Guidance so far developed by the Committee for the financial mechanism refers explicitly to the transfer of technology only once, in providing that with respect to activities undertaken under Article 11 within the framework of the financial mechanism, "the operating entity or entities should ensure that, with reference to activities involving transfer of technology, such technology is environmentally sound and adapted to suit local conditions" (A/AC.237/76, para. 81 (a) (iii)).

13. The above provisions of the Convention and initial guidance given by the Committee thus provide the following elements of a framework for the transfer of technology:

(a) Technology transfer is to take place under the Convention for the implementation of activities related to mitigation (greenhouse gas emissions abatement and absorption by sinks and reservoirs) and adaptation. The Convention mentions specific sectors in these categories of activities:

(i) With respect to abatement: energy, transport, industry, agriculture, forestry and waste management;

(ii) With respect to sinks and reservoirs: biomass, forests, oceans and other terrestrial, coastal and marine ecosystems;

(iii) With respect to adaptation: coastal zone management, water resources and agriculture, including food production, rehabilitation of areas affected by drought, desertification and floods, particularly in Africa;

The pace and focus of transfer of technology under the Convention should be consistent with identified programme priorities in the above areas;

(b) The technologies transferred are to include innovative, efficient and state-of-the-art technologies that are environmentally sound and adapted to suit local conditions. Their identification is a function of the SBSTA. Technical advisory panels envisaged under the SBSTA may play a role in this regard;

(c) Developed country Parties are to take action to promote, facilitate and finance the transfer of or access to environmentally sound technologies and know-how to other Parties; these other Parties will include particularly developing country Parties but also economies in transition;

(d) Funding for the transfer of technology is to be provided through the financial mechanism, for which developing country Parties are eligible, or through other channels mentioned in Article 11.5. Activities involving transfer of technology to developing countries and to economies in transition are eligible as appropriate to be funded through these other channels. Joint implementation may also play a significant role in promoting transfer of technology with the involvement of the private sector.

III. WAYS AND MEANS OF OPERATIONALIZING TRANSFER OF TECHNOLOGY

14. Transfer of technology will take place in the context of productive activities generally involving investments, private or public, foreign or domestic. Based on the above elements and on suggestions made by delegations, initial modalities for facilitating the operationalization of transfer of technology in such productive activities may focus on strengthening technological capabilities and information exchange.

A. Strengthening technological capabilities

15. This involves both expanding the availability of technological information and improving the technological absorptive capacity in developing countries. This is best done through the establishment of new institutions or through technological capacity building in existing institutions. Identification of institutions with a regional role should be given consideration. Networking arrangements among institutions would enhance the effectiveness of capacity strengthening efforts. Technological strengthening should include "soft" technologies and know-how such as the removal of institutional obstacles or the improvement of economic policies and regulatory capabilities. Deployment of new technologies will be optimized through an appropriate mix of "science-push" and "market-pull".

16. While overall coordination at the national level of climate change-related technology strengthening may be required as part of Convention implementation efforts, technological strengthening will be achieved sectorally so as to be reflected in industrial processes and practices. The involvement of the private sector is critical in this regard and consideration

could be given to modalities for engaging its active participation in such processes. International institutions – environmental, sectoral and financial – also have an important role to play. Particular attention should be given to cooperation between technology-oriented institutions and production facilities. Opportunities offered by public-domain technologies should be fully utilized.

B. Information exchange

17. This would cover:

(a) Ongoing activities of transfer of technology, including relevant information provided in national communications;

(b) Available supply of technological solutions;

(c) Expressed demand for technological solutions;

(d) Technological advice relevant to climate change;

(e) Available information on technology assessment;

(f) Organization of workshops, seminars and other specialized meetings;

(g) Promotion of joint projects.

18. For such information exchange functions, full use should be made of existing mechanisms, which may need to be strengthened and complemented, as appropriate. CC:INFO, the Climate Convention information exchange programme, may be mentioned in this regard. Attention is also drawn to the opportunities offered by GREENTIE, a programme established by the International Energy Agency and the Organisation for Economic Co-operation and Development for the provision of technological advice for the abatement of greenhouse gas emissions. Many other sources – public and private – of technological advice for specific activities (such as energy conservation, renewable sources of energy, agriculture and forestry technology, and so forth) exist and would need to be surveyed. Assistance to developing countries in facilitating their interaction with technological advice institutions should also be given attention.